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**California Water Impact Network Produces First Study
Quantifying “Paper Water” in the 20 Rivers of the Delta Watershed**

The California Water Impact Network (C-WIN) has completed the first analysis comparing Central Valley water availability with water rights claims. **Consumptive water rights claims are 5.5 times more than the available water supply.**

This study was submitted as testimony to a State Water Resources Control Board (SWRCB) workshop on the possible revision of the Bay Delta Water Quality Control Plan (BDCP). CW WIN’s testimony documents the disparity between the availability of water and existing water rights claims in the Sacramento, San Joaquin and Trinity Rivers and their tributaries. Further, the report demonstrates that the federal Central Valley Project (CVP) and the State Water Project (SWP) lack adequate water to service promised contract deliveries.

CW WIN’s testimony shows that water rights account for up to five times the water that is available in the Sacramento and San Joaquin Rivers. For the Trinity River, water rights claims exceed available supply by a factor of seven. The difference between claimed water rights and average river flows is summarized below from the report.

River Basin	Annual Flows	Water Rights***	Ratio
Sacramento R. Basin*	21.6 MAF	120.5 MAF	5.58
San Joaquin R. Basin**	6.2 MAF	32.7 MAF	5.28
Trinity R. Basin*****	1.283 MAF	8.725 MAF	6.70

The problem facing our rivers and the Delta is thus clarified when annual flows are compared to the water rights that are claimed. This disparity between real and contractual water is known as “paper water.” It is water, in other words, that exists only in state or federal documents, not in California’s rivers.

The CVP and SWP are predicated on junior water right claims; they can only divert water after stakeholders with senior water rights have taken their shares. The projects therefore cannot provide full contract deliveries, especially during drought. Water rights are a form of property. They entitle an owner to use water from a specific point at a specific stream at a specific time. But disaster looms when the state authorizes far more water rights than nature and human engineering can provide. California’s water code has evolved – or metastasized – over the course of 150 years. It is a jumble of prior practices, dueling lawsuits, conflicting legislation, and water projects that consistently have performed under expectations. The current over-allocation of water is the end result of this ad hoc, and ultimately unworkable, process.

This over-allocation is similar to the “clouded titles” problem in real estate: a lack of clarity in legal rights that leads to continuous dispute. In the case of water, this ratchets up the pressure on water agencies to “produce” water that doesn’t exist. The CVP and the SWP water rights are essentially “clouded titles” for water in the Sacramento and San Joaquin Rivers and their tributaries. The SWP was predicated on damming the state’s North Coast Rivers, with their waters delivered to the Delta for export. These streams ultimately were declared off-limits due to Wild and Scenic designations in the 1980s. Five million acre feet of water from the North Coast never made it to the CVP and SWP, but the operators of these projects distributed contracts and exported from the Delta as though the water was in the pipeline. They were, in short, creating “paper water.” The Delta’s ecological collapse has been the result.

If Wild and Scenic River protections remain in place, senior water rights are honored and water quality standards are met, there will be little if any “surplus” water available for export south of the Delta. In plain language, this means that there is scant water available to the CVP and the SWP at any time – especially during drought. While the C-WIN Paper Water Availability Analysis did not discuss the implications of the Twin Tunnels, it is clear that the inadequate water rights of the CVP and the SWP would make it legally difficult to operate such a conveyance system. Any rights the state could acquire to operate the tunnels on the lower Sacramento River would be at least as junior as current rights. Also, there is insufficient water to fill the tunnels. Reduced snowpack due to climate change will exacerbate an already untenable situation. Water ratepayers and taxpayers should not be expected to expend billions of dollars for a system that will provide no extra water, and could actually result in reduced deliveries.

Further, the Bay Delta Conservation Plan (BDCP) and the Twin Tunnels would reduce Bay-Delta outflows, conflicting with the SWRCB’s 2010 Bay-Delta outflow recommendations, which were developed to determine the flows necessary for the recovery of listed fish populations. Decreased flows will also concentrate and increase the persistence of contaminants such as selenium and pesticides in the Bay-Delta. The C-WIN analysis thus recommends that the SWRCB enforce water rights and water quality standards as a priority, and provides suggestions to that end; indeed, the Board’s public trust and beneficial uses mandate requires such action.

The C-WIN report clearly documents the great and growing gap that separates water rights claims from available water. It is a fact that the state and federal water projects are at the back of the line in water rights seniority. They face the most immediate cut-backs in the event of decreasing snowpack, increasing drought, and dedication of water to meet public trust and beneficial use obligations. The State Water Resources Control Board clearly has been unable or unwilling to reign in paper water claims. It would be catastrophic to compound the error with a massive, ruinously expensive and environmentally destructive project like the Twin Tunnels.

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